

19980920.qrp v01_n220.qrs.980920

Date: Sun, 20 Sep 1998 19:03:11 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1220

QRP-L Digest 1220

Topics covered in this issue include:

- 1) [20531] TTF report
by Steven Weber <kd1jv@moose.ncia.net>
- 2) [20532] WTB:Kenwood TS-130V
by n3bj@hotmail.com
- 3) [20533] Toroids and "Q"
by PDouglas12@aol.com
- 4) [20534] KnightSMite
by "C. Lamar Derk" <n3at@epix.net>
- 5) [20535] QRP Afield--great fun!
by "David Ek" <ekdave@earthlink.net>
- 6) [20536] Re: 10 Mtr AM Repeater
by w4bws@juno.com (Donald E Sanders)
- 7) [20537] re: 10 meter repeater
by MJC191@aol.com
- 8) [20538] QRP-afield summary -- WE6W
by we6w@juno.com
- 9) [20539] RE: Toroids and "Q"
by Tracy@bytemark.com (Tracy)
- 10) [20540] Download TS-520S Manual
by "Keith Martin" <martins@ccosmo.net>
- 11) [20541] RE: Toroids and "Q"
by Denton Bramwell W7DB <Denton@Bramwell.Org>
- 12) [20542] Re: HW8 output cores
by David Snowdon <norway@interlog.com>
- 13) [20543] Use of toroid as base loading coil in QRP TX antenna
by David Feldman <dgf@netcom.com>
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by mfitz@uswest.net
- 15) [20545] FS: Sierra
by Tim Ahrens <tahrens@inetport.com>
- 16) [20546] Trade QRP Rigs
by Kelly Ellison {WB0WQS} <kelman@dialnet.net>
- 17) [20547] RE: Use of toroid as base loading coil in QRP TX antenna
by Denton Bramwell W7DB <Denton@Bramwell.Org>
- 18) [20548] QRP Afield
by Kelly Ellison {WB0WQS} <kelman@dialnet.net>
- 19) [20549] Re: KnightSMite

- by W7LS <w7ls@blarg.net>
- 20) [20550] For Sale stuff
by mwattcpa@earthlink.net (Marty Watt)
- 21) [20551] RE: Use of toroid as base loading coil in QRP TX antenna
by Tracy@bytemark.com (Tracy)
- 22) [20552] QRP AFIELD IN CANUCK LAND
by Earl Murphy <earlmurf@telusplanet.net>
- 23) [20553] Elmer 101
by ka7you@juno.com
- 24) [20554] kayak/qrp IOTA dxpedition update
by Ab7wy@aol.com
- 25) [20555] Vertical Dipoles and Ground Planes Update
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 26) [20556] qrp rigs for sale
by "Jerry W. O'Dell" <jwodel@ameritech.net>
- 27) [20557] SV9/SM0HPL on the air in one hour
by ANDERS WANDAHL <qrp@usa.net>
- 28) [20558] LTA Straight Keys
by "Alyn Backe" <ve6bpr@cnnet.com>
- 29) [20559] MFJ Reflector?
by MJC191@aol.com
- 30) [20560] Re: MFJ Reflector?
by "Tim, KD5CKP" <kd5ckp@bellsouth.net>
- 31) [20561] QRP Items For Sale:
by Jeff Grudin <grudin@pacific.vdbs.com>
- 32) [20562] Re: Am audio
by RABRUNER@aol.com
- 33) [20563] QRP Afield log
by Bruce Grubbs <bog@flagstaff.az.us>
- 34) [20564] Ten-Tec Price Question
by w4bld@juno.com
- 35) [20565] Re: suppressed carrier FM
by RABRUNER@aol.com
- 36) [20566] PVC, Sideband FM, Narrow FM, and the Heath Dipper er
by "James R. Duffey" <jamesd1@flash.net>
- 37) [20567] Sierra Sold
by Tim Ahrens <tahrens@inetport.com>
- 38) [20568] cell phones and CW
by mikemo@ibm.net
- 39) [20569] Re: Am audio (overmod)
by RABRUNER@aol.com
- 40) [20570] QRP Afield
by Ken Newman <n2cq@citnet.com>
- 41) [20571] ten mtrs
by marion@montana.com
- 42) [20572] Re: GOLDMINE FORTHCOMING:
by Bob Painter <turnkey@exo.com>
- 43) [20573] QRP Afield, W0CQC op

- by "Marshall Emm" <mgemm@mtechnologies.com>
- 44) [20574] RE: QRP Items for Sale
by Jeff Grudin <grudin@pacific.vdbs.com>
- 45) [20575] RE: ten mtrs
by Rich Mulvey <mulveyr@mulveyr.roc.servtech.com>
- 46) [20576] 'QRP Afield'- Reporting
by Bensondj@aol.com
- 47) [20577] Re: Am audio (overmod)
by BADDBadger@aol.com
- 48) [20578] Re: cell phones and CW
by BADDBadger@aol.com

Date: Sat, 19 Sep 1998 18:30:58
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [20531] TTF report
Message-ID: <3.0.3.16.19980919183058.2f8710b4@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I managed to get to my field location a little earlier than expected, was up and running by about 19:30 Z. Wx could not have been better, very fine day for a field operation. Had to shut down about 21:30Z as the sun was setting and had to be out by dark. Signals were weak on 20 M for the most part, though a couple of mw stations came in nice and strong! Highlight of the day was when DL2MDC came back to my "CQ test QRP" call and gave me a 569 to 549 (qsb) report. As luck would have it, just as I'm giving him his report, a ranger drives up and asked I had cleared my operation with so and so, sure I said, and I'll be out by dark. Guess you can send code and talk to rangers at the same time, hi.

Only 13 contacts, but was fun!

W4ED, W8IZZ, AF5Z, N4ROA, KB9LCK, DL2MDC, KI0AF, N4FNG, W2KJ, WK8S and K0EVZ. Maybe W9UF0, if you got my report?

Heard some others in there, but no go.

RIG, Homebrew running between 3.8 to 3.5 watts, ant 3 wire vertical in tree. (two radials) Location, Miland Hill State Park, top of a nice hill in the White Mountains.

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Sat, 19 Sep 1998 23:24:26 GMT
From: n3bj@hotmail.com
To: qrp-1@Lehigh.EDU
Subject: [20532] WTB:Kenwood TS-130V
Message-ID: <199809192324.SAA13419@x9.dejanews.com>

Wanted: Kenwood TS130V, non-working unit considered. Please let me know if you have one that is surplus to your needs.

Alan, N3BJ
Bent Mountain, VA

Date: Sat, 19 Sep 1998 19:45:47 EDT
From: PDouglas12@aol.com
To: qrp-1@Lehigh.EDU
Subject: [20533] Toroids and "Q"
Message-ID: <47428349.3604422b@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Gang,

Whenever I build something, I learn a lot. This time, I am doing a scratch project with the help of some friends online. The project is based on a set of unannotated schematics, which makes it that much more challenging. An early error, quickly caught by the designer, (but after my parts order arrived) left me without the right toroid core for the output of my VF0. (Note, the designer is one of the friends helping me along--so he sent me on a couple of the correct cores.) But the interesting part is what happened in the meantime. The correct core was an FT 37-61. I only had FT 37-43 mix cores. But, thinking I can substitute, I consulted Paul Harden's handbook, and wound myself a transformer with the appropriate number of turns to get the same inductance as the 61 core had--or close to it, and then compensated for the difference with a fixed cap after measuring a variable cap used to tune for resonance. Tuning to resonance with the help of the scope showed that I was not getting enough output voltage with the wrong core. This, despite having a tuned circuit in the primary at resonance, and the correct turns ratio between primary and secondary, albeit different absolute numbers

of turns, of course. Thinking back, the peak at resonance was noticeable, but not impressive, and that should have told me something. Today, the new core arrived (and my friend, not wanting to take any chances with me, had wound the turns and stripped the enamel on the ends of the transformer. Way above and beyond the call....) As soon as the solder was cool, and power was applied, the scope showed that I had a huge difference in voltage at the output of the transformer. Of course, I had put in the fixed cap originally called for, without even having to further fine tune to resonance.

Now, could someone tell me if this was my poor technique in matching and varying capacitance to find resonance on the 43 core, or is the Q so important in such a circuit? Why?

Thanks guys.

72,

Preston Douglas WJ2V

Date: Sat, 19 Sep 1998 20:29:12 -0400
From: "C. Lamar Derk" <n3at@epix.net>
To: qrp-l@lehigh.edu
Subject: [20534] KnightSMite
Message-ID: <36044C58.519C@epix.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Got my second KnightSMite completed, and found that it would not work. The transistor, Q2, which is a 2N2222, seems to be the problem. Anyone know where I can obtain a single surface mount 2N2222?

72 de Lamar

Date: Sat, 19 Sep 1998 18:55:12 -0600
From: "David Ek" <ekdave@earthlink.net>
To: <qrp-l@Lehigh.EDU>
Subject: [20535] QRP Afield--great fun!
Message-ID: <000901bde431\$535a5000\$21ab85ce@davidek>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Gang,

Had a blast this afternoon working the QRP Afield contest! Best outing for me in a QRP contest so far. 48 qso's, 18 spc's, all on 20m, running 2W out of my SW+20. Had a couple stations check in with a bit more power (one sent "KW!"). But good sigs from across the country. Tnx to Dave Benson NN1G for putting it together (and nice sig from VT, Dave!).

72 de Dave AB0G0

Date: Sat, 19 Sep 1998 19:58:32 -0400
From: w4bws@juno.com (Donald E Sanders)
To: nop@swbell.net
Cc: qrp-l@Lehigh.EDU
Subject: [20536] Re: 10 Mtr AM Repeater
Message-ID: <19980919.210931.8582.0.W4BWS@juno.com>

I'm planning to link the 10 AM to my 146.625/025 repeater as well as my 28.335 ssb, and 29.6 FM remote base. I hope it will allow many to work into central east coast Florida. Maybe we should pick some freq's up toward the middle or top of 29.0to29.1 so as not to interfere with simplex , or maybe otherws would like to have a calling channel like 29.6 is for FM ans link on that freq. What is the opinion?

Great ideas sure do abound with the "CAN DO" folks on QRP-L

Donald E. Sanders W4BWS

694 E. Eau Gallie Blvd. Satellite Beach, Fl 32937

407-779-0222 Fax 407-779-0830

E-mail to w4bws@juno.com

My favorite QRP rig glows in the dark

On Sat, 19 Sep 1998 03:02:50 -0500 "Randy Jouett" <nop@swbell.net> writes:

>Ok. The time has arrived for a 10-mtr AM repeater via 220 remote link.

>First of all, is there anyone already doing this?

See comments above

>available above 29.6??

(Not a good idea since this is the FM calling freq.)

>This would sure be a cheap way to put a lot of people on the air,
>especially with Maxon CB rig @ \$35 and Steve's conversion kit
and such. The only addition would be xmit offset, the way I see it.
> Randy, good idea for a repeater. I'm going the remote
base way myself then the AMers can stay simplex if they want to

>Have any old dust-collecting 220 stuff or CB Amps hanging around? I'd
>be glad to hack a repeater together if anyone is interested.
> What you guys think?
>73, Randy AB5NI
>nop@swbell.net

I may want a couple 220 rigs myself-
anyone got a couple Midland 509's around
DON W4BWS

>
>

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sat, 19 Sep 1998 21:19:13 EDT
From: MJC191@aol.com
To: qrp-1@Lehigh.EDU
Subject: [20537] re: 10 meter repeater
Message-ID: <a39020a.36045811@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Have my trusty old Midland ex-cb rig oiled up and ready to go on 10 AM qrp.
How about 29.09 as a repeater freq?

Mike NA1XX / Weymouth MA

Date: Sat, 19 Sep 1998 18:23:59 -0700
From: we6w@juno.com
To: qrp-1@lehigh.edu
Subject: [20538] QRP-afield summary -- WE6W

Message-ID: <19980919.182401.3902.0.we6w@juno.com>

YeeHa! Glad y'all cud come to the party.

I especially had fun on 15 meters. Signals were a bear to hear, but due dilligence paid off! Even worked Finland with my 5 watts!

Boy, that Tri-Wire dipole I made for the Nerds contest last week radiates well anywhere above 80 meters. Still NIL on 80 meters with it.

Had a nice WSN-40 QRP Net crowd this morning. Then off to the races with the QRP-Afield contest.

One of my boys decide to make hot cocoa and dumped my pot of freshly brewed "Contest Coffee" down the drain... "But Dad! It looked like it was left over from last night, with all them bumps an' all..."

Hee, hee. Seriously, I only added ONE extra scoop!

Here's the totals for Mr. Slow-Ranger himself:

WE6W Home Station, Drake TR-3, 5Watts out to Homebrew 600 Ohm ladderline feeding Tri-Wire dipole.

SPC's: 29

QSO's: $54 * 2$ points for home op = 108 points.

Total: $29 * 108 * 2$ (5watt power)=6264 points.

Was nice working the elusive Vole and was happy to work Alan/KB7MBI whose delicious Cookies and other prizes awarded for my "Simple Antenna" night first place win were Fabulous!!

Gotta luv this hobby!

Best operating to all. Now to catch up on the qrp-l reading.

"72" Ed WE6W

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Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sat, 19 Sep 1998 22:10:20 -0400
From: Tracy@bytemark.com (Tracy)
To: "QRP-L" <qrp-l@Lehigh.EDU>, <PDouglas12@aol.com>
Subject: [20539] RE: Toroids and "Q"
Message-ID: <000001bde43b\$d1880e40\$0b771ad1@titan>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

> The correct core was an FT 37-61. I only had FT 37-43 mix
> ... could someone tell me if this was my poor technique in matching and
> varying capacitance to find resonance on the 43 core, or is the Q
> so important
> in such a circuit? Why?

More than Q, the properties of the material may have had a play in things.
Different materials have different ranges of resonant circuit capabilities,
and they attenuate different frequencies. 43 and 61 materials differ
greatly.

If you look at Amidons charts of material properties, you may get a picture
of what I mean. Check out

<http://www.bytemark.com/amidon/fermgprp.htm> and

<http://www.bytemark.com/amidon/fermprp2.htm>

for properties of the more common ferrite materials.

Hope that helps.

Tracy N4LGH

QRP-L #1453

Tracy Markham
ByteMark / Amidon
tracy@bytemark.com
www.bytemark.com
407 679-3184

Date: Sat, 19 Sep 1998 19:08:48 -0700
From: "Keith Martin" <martins@ccosmo.net>

To: qrp-1@Lehigh.EDU
Subject: [20540] Download TS-520S Manual
Message-ID: <199809191908480250.012756CD@cosmoaccess.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"
Content-Transfer-Encoding: quoted-printable
Content-Transfer-Encoding: quoted-printable

Does anyone know of a site that I could download a TS-520S manual? I have been looking all over tonight and can't find one!

Thanks,

Keith

Date: Sat, 19 Sep 1998 20:25:42 +0100
From: Denton Bramwell W7DB <Denton@Bramwell.Org>
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>
Subject: [20541] RE: Toroids and "Q"
Message-ID: <5103124387F8D11199DD00A0C925E4B9167A@SQLMAILSERVER>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

The answer to your question can be fairly complex. I certainly don't understand all of it, but maybe what I do know will help.

The Gory Stuff:

Part of the answer lies in how magnetic materials "work". If you expose a ferromagnetic material to an external magnetic field (H vector), the molecules/domains will try to line up and create a parallel magnetic field of their own (M vector). In many cases, the strength of M is much greater than H. Familiar example: Wind a coil of wire, and measure the magnetic field when you pass a current through it. Fill the core with iron, and measure again. The total external field is now many times stronger. It is ALMOST like getting something for nothing. If you continue to increase the current in the loop, M will continue to grow in proportion to H, until the magnetic material is pretty well aligned. After that, it can't continue to contribute field, and is said to be saturated.

Now one interesting question to ask is, How fast can I flip my magnetic material back and forth with an external field? Some flip quickly, and some don't. If my material won't flip nicely, I get high losses. I think that part of the issue is that the transformer starts to act more

and more like an air core transformer.

More Practical Stuff:

Type 43 has a high initial permeability (850), a terrible temperature coefficient (about 500 at 0 C, 1500 at 100 C), and losses that escalate rapidly above 1 MHz. Type 61 core has a lower initial permeability (125), a tempco that is essentially flat from 20-200 C, much lower losses up to 1 MHz, and losses that seriously escalate above 5-10 MHz. In short, even with equal inductances, the two cores will behave quite differently.

Keep on experimenting... each lesson is one more thing you understand and can apply.

-----Original Message-----

From: PDouglas12@aol.com [mailto:PDouglas12@aol.com]

Sent: Saturday, September 19, 1998 5:46 PM

To: Low Power Amateur Radio Discussion

Subject: Toroids and "Q"

Gang,

Whenever I build something, I learn a lot. This time, I am doing a scratch project with the help of some friends online. The project is based on a set of unannotated schematics, which makes it that much more challenging. An early error, quickly caught by the designer, (but after my parts order arrived) left me without the right toroid core for the output of my VFO. (Note, the designer is one of the friends helping me along--so he sent me on a couple of the correct cores.) But the interesting part is what happened in the meantime. The correct core was an FT 37-61. I only had FT 37-43 mix cores. But, thinking I can substitute, I consulted Paul Harden's handbook, and wound myself a transformer with the appropriate number of turns to get the same inductance as the 61 core had--or close to it, and then compensated for the difference with a fixed cap after measuring a variable cap used to tune for resonance. Tuning to resonance with the help of the scope showed

that I was not getting enough output voltage with the wrong core. This, despite having a tuned circuit in the primary at resonance, and the correct turns ratio between primary and secondary, albeit different absolute numbers of turns, of course. Thinking back, the peak at resonance was noticeable, but not impressive, and that should have told me something. Today, the new core arrived (and my friend, not wanting to take any chances with me, had wound the turns and stripped the enamel on the ends of the transformer. Way above and beyond the call....) As soon as the solder was cool, and power was applied, the scope showed that I had a huge difference in voltage at the output of the transformer. Of course, I had put in the fixed cap originally called for, without even having to further fine tune to resonance.

Now, could someone tell me if this was my poor technique in matching and varying capacitance to find resonance on the 43 core, or is the Q so important in such a circuit? Why?

Thanks guys.

72,

Preston Douglas WJ2V

Date: Sat, 19 Sep 1998 23:01:30 -0400 (EDT)
From: David Snowdon <norway@interlog.com>
To: qrp-l@lehigh.edu
Subject: [20542] Re: HW8 output cores
Message-ID: <Pine.BSI.3.96r.980919230027.10070A-100000@shell1.interlog.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Re: HW-8 Bandpass filter info. needed, rsorge@phoenix.net writes:

>>>>>>

The final amplifier output circuit in the HW-8 is different than the lowpass filters that are seen in the SW-40+, etc. Can someone explain the difference and the way to check these. Also the torroids for 80 meters have very

high values on the schematic. Ex. L-26 15.5uH and L-27 27.5uH. How do you winnd torroids for these high values? My charts show values like 2.434uH and 3.012uH for 80 meterslow pass filter. Can someone head me in the right direction?

Thanks,
72 de Bob
<<<<<<<<

Hi Bob, look in the qrp archive via:

ftp.lehigh.edu /pub/listserv/qrp-l/articles

and get a file called 'badhw8cores.mcq'. This file will explain that the 80 and 40 meter cores change their values over time, and will tell you how to replace the cores.

norway@interlog.com David Snowdon (VA3DKS) Toronto, Ontario, CANADA

Date: Sat, 19 Sep 1998 20:12:28 -0700 (PDT)
From: David Feldman <dgf@netcom.com>
To: qrp-l@Lehigh.EDU
Subject: [20543] Use of toroid as base loading coil in QRP TX antenna
Message-ID: <199809200312.UAA11791@netcom4.netcom.com>

With the low transmit power of QRP, is it possible to use a toroid core as the base loading coil in a (very) short vertical antenna?

73 Dave WB0GAZ dgf@netcom.com

Date: Sat, 19 Sep 1998 22:16:18 -0500
From: mfitz@uswest.net
To: qrp-l@Lehigh.EDU
Subject: [20544] QRP FIELD REPORT
Message-ID: <36047382.179E3EEE@pop.omah.uswest.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

OK QRP fans, a good time was had by me. Thanks to all the fine operators on the bands today. Set-up on bluffs overlooking Missouri River bottomlands with a vertical loop on 20(top-fed) and inverted-vee on 15/40. Both fed with twinlead via LDG autotuner thru HB 1:4 balun. Both at about 40 ft. OHR 400 on 20/40, OHR 100 on 15. Bands were so so...Approaching cold front made 40 useless last half of 'test due to increasing QRN. 15 was not much either. Heard Ed(WE6W) on 15 for a long time! Worked some very strong stations including WA8RXI, W4ED, WA7YYY, and K7ZEN(heavy signal for 950 mW). Mostly, I'd just like to thank everyone for the great time, even if we didn't get a contact today. What I find remarkable is the cordial and friendly atmosphere that seems to permeate these operations, everybody's SO cool! The count: 40 M.--2(only), 20 M.--46, 15 M.--7. Catch you next 'test, comrads. Mike KI0AF/QRP Missouri Valley IA

Date: Sat, 19 Sep 1998 22:20:26 -0500
From: Tim Ahrens <tahrens@inetport.com>
To: qrp-l@Lehigh.EDU
Subject: [20545] FS: Sierra
Message-ID: <3604747A.9424DCF4@inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi Folks.. gotta make way for a new kit!

Sierra with KC2/custom front panel and 3 band modules (40, 30, & 20).

Perfect, inside & out. Certified fox nabber!

\$325, or more if you'd like.

Please e-mail me direct.

Thanks,

Tim W5FN

Date: Sat, 19 Sep 1998 22:59:00 -0500

From: Kelly Ellison {WB0WQS} <kelman@dialnet.net>
To: qrp-1@Lehigh.EDU
Subject: [20546] Trade QRP Rigs
Message-ID: <36047D84.D5C72BEF@dialnet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi All,

Have to many 40 meter rigs so I'd like to trade for something I could use.

For Trade:

S&S Engineering TAC-1 40 meter Transciever. Knob tuned Digital readout. Super nice Keying and nice Enclosure. Thought I would use it more.

Ten-Tec 1340 Radio. Works and looks good. Just got this rig, but it I really shouldn't have!

Would like to Trade ONLY. For unbuilt kits, nice SST-20 or Similar. I would consider trading up.
If you would like more information on these radios, feel free to contact me at kelman@dialnet.net
Drop me a note and let me know what you have to trade.

Thank you,

Kelly Ellison
WB0WQS
Aurora, Missouri

Date: Sat, 19 Sep 1998 22:24:34 +0100
From: Denton Bramwell W7DB <Denton@Bramwell.Org>
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>
Subject: [20547] RE: Use of toroid as base loading coil in QRP TX antenna
Message-ID: <5103124387F8D11199DD00A0C925E4B9167C@SQLMAILSERVER>
MIME-Version: 1.0
Content-Type: text/plain

>>With the low transmit power of QRP, is it possible to use a toroid core as the base loading coil in a (very) short vertical antenna?<<

This is a complex question. The answer depends on the voltage across the inductor, the cross sectional area of the inductor, and the frequency. In the following examples, if you halve the turns, you can double the voltage. If you double the turns, you must halve the voltage. These are maximum safe guidelines.

These figures are good for 40 meters.

T-50-XX, 7 MHz, 10 turns: Max safe RF voltage = 21.5

T-68-XX, 7 MHz, 10 turns: Max safe RF voltage = 34.7

T-106-XX 7 MHz, 10 turns: Max safe RF voltage = 122

These numbers are for 20 meters

T-50-XX, 14 MHz, 10 turns: Max safe RF voltage = 31

T-68-XX, 14 MHz, 10 turns: Max safe RF voltage = 51

T-106-XX 14 MHz, 10 turns: Max safe RF voltage = 180

These numbers are for 10 meters:

T-50-XX, 28 MHz, 10 turns: Max safe RF voltage = 45

T-68-XX, 28 MHz, 10 turns: Max safe RF voltage = 73

T-106-XX 28 MHz, 10 turns: Max safe RF voltage = 257

This leaves a few issues for you to work out....

Date: Sat, 19 Sep 1998 23:39:58 -0500
From: Kelly Ellison {WB0WQS} <kelman@ dialnet.net>
To: qrp-l@Lehigh.EDU
Subject: [20548] QRP Afield
Message-ID: <3604871E.DC7FD7FB@ dialnet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Thank you for a great activity today!

WB0WQS was setup Southwest of Branson on a hill overlooking TableRock Lake in the Ozarks. Ran all but about 2 hours of the Sprint. I made about 50 contacts mostly on 20 meters with a QRP plus and a coiless St. Louis Vertical/LDG tuner.

Had trouble with the QRP+ overheating but had fun. It was nice to work

so many familiar calls that are seen here on the list. There were some very strong QRP signals. I had trouble towards the end finding non dupes. Temps were in the 90's and the humidity was high. Thanks again for a great Saturday afternoon.

Kelly Ellison
WB0WQS
Aurora, Missouri

Date: Sat, 19 Sep 1998 21:52:34 -0700
From: W7LS <w7ls@blarg.net>
To: n3at@epix.net
Cc: qrp-l@lehigh.edu
Subject: [20549] Re: KnightSMite
Message-ID: <36048A12.40D6@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

C. Lamar Derk wrote:

>
> Got my second KnightSMite completed, and found that it would not work.
> The transistor, Q2, which is a 2N2222, seems to be the problem. Anyone
> know where I can obtain a single surface mount 2N2222?
> 72 de Lamar

Hi. You can buy a bag of about 20 from Active Electronics in Bellevue, WA for about \$5. 425-881-8191

73 de Jim, W7LS

Date: Sun, 20 Sep 1998 05:19:51 GMT
From: mwattcpa@earthlink.net (Marty Watt)
To: qrp-l@Lehigh.EDU, tcg@k4ro.net
Subject: [20550] For Sale stuff
Message-ID: <36068cc2.51242613@mail.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable
Content-Transfer-Encoding: quoted-printable

Hi Folks,

In order to facilitate the purchase of a little QRP rig, I need to raise =
some
capital, therefore the following items, some radio related, some not, are=
for
sale:

20 amp power supply, built by a "professional" homebrewer in East =
Tennessee
(not me), \$80 plus shipping (it do weigh a bit).

Parallel port Zip drive, two carry cases, power supply and portable power
adapter, battery supply, 10 zip disks -- \$135 plus shipping.

Alvarez bicentennial edition guitar, six string, pearl inlay fingerboard,
slightly pulled neck and a couple of nicks on the top. One of a run of =
750 (I
think) -- \$200 plus shipping.

TUMI leather softside computer carrying case/briefcase combo. Safe carry
system, delux computer briefcase style 9626D Black. 17.5 x 12.5 x 6.5
expandable to 9.5. Uses the neoprene "sling" concept for the computer
transport area -- computer never touches the ground. I have a reciept =
showing
my purchase Aug. 16 of last year for over \$480. Lifetime warranty on =
TUMI
leather goods! \$210 plus shipping.

=46ree Delivery to Metro Memphis, west Tennessee, Metro Nashville, Metro =
Little
Rock, Northern Mississippi and all points in between ...

--

72 es 73 de Marty, KM7W

Memphis, Tennessee <http://home.earthlink.net/~mwattcpa>
NorCal #2031 -- ARCI #7514 -- QRP-L #0953 -- AK/QRP #098 -- Grid EM55

Date: Sun, 20 Sep 1998 00:57:30 -0400
From: Tracy@bytemark.com (Tracy)
To: "QRP-L" <qrp-l@Lehigh.EDU>, <dgf@netcom.com>
Subject: [20551] RE: Use of toroid as base loading coil in QRP TX antenna
Message-ID: <000001bde453\$2be09940\$59771ad1@titan>
MIME-Version: 1.0

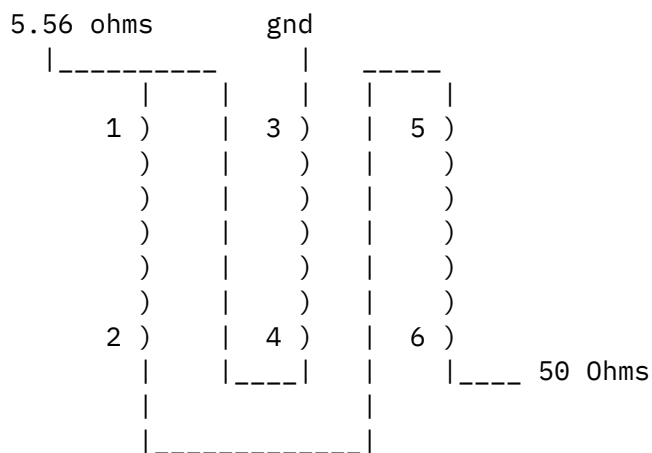
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

A very short vertical antenna will usually have a very low feedpoint impedance. If your feedpoint impedance is near 5 and a half ohms or so, then I have a transformer that will work very well for you.

Dr. Sevvick designed a 9:1 UNbalanced to UNbalanced (UNUN) transformer for shor verticals that transforms 50 ohms to 5.56 ohms. It uses 7 trifilar turns tightly wound on an R33-050-400 ferrite rod. The center conductor is #12 Formvar wire and the outside two are #14. I've used the Thermaleze wire for this one and it seemed to work just fine.

Because it's on a rod it's fairly easy to keep a constant impedance, hence good efficiency. If built right it can give you 99% efficiency.

I'll try my hand at the schematic: (monospaced font ...)



I've used this in conjunction with an L match between the 5.56 ohm side and the antenna for very low impedances.

Hope that helps!

Tracy N4LGH

QRP-L #1453

Shameless plug --

You can get info on the rod from ByteMark

<http://www.bytemark.com/amidon/rod1.htm>

Tracy Markham

ByteMark / Amidon

tracy@bytemark.com

www.bytemark.com
800 679-3184

> With the low transmit power of QRP, is it possible to use a toroid
> core as the base loading coil in a (very) short vertical antenna?

Date: Sat, 19 Sep 1998 23:22:36 -0500
From: Earl Murphy <earlmurf@telusplanet.net>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [20552] QRP AFIELD IN CANUCK LAND
Message-ID: <3604830C.D20@telusplanet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi Gang...Haven't been on the reflector for a spell, it's nice to be back...GOOD SIGS, into Southern Alberta on 20M this PM...I guess I won't have to put up that beam, used a GM-20 at 3W, into an 80/40/20 trapped dipole....THANKS GUYS for a pleasant afternoon QRP'ing as it should be...Logged the following boomers, and milliwatters::W0CQC, N2CQ, N0IBT, N4ROA, W0UFO, AC6KW, K7ZEN, N6RY, AB0GO, WA8RXI, KG5N, N6WG, W4ED, N6MM, AF5Z, KI0G, AF7Y, WE6W, N5TW, WB0WQS, KB7MBI, W6IEU?(I think)....Steve(KD1JV), I wasn't as lucky as you with that (DL2MDC), CONGRATS...called him but no cigar, would have been a nice catch...See you all in Oct. FOX HUNTS....72/73....Earl (VE6EWM)

Date: Sun, 20 Sep 1998 01:49:03 EDT
From: ka7you@juno.com
To: QRP-L@Lehigh.EDU
Subject: [20553] Elmer 101
Message-ID: <19980919.220230.4935.5.KA7YOU@juno.com>

I wonder if anyone has a more or less complete set of Elmer 101 correspondence in a file they could forward. I have most of it, but since Juno hiccuped on me, it is very tedious to get at.

I have not yet started my SW-30 project, and was saving the correspondence for the fall building season, when I knew I would have more time.

I can receive a file transfer via an AOL account, so if anybody can help me, I would give that address to you.

Thanks,

Rod Johnson KA7YOU from CN97ak near Issaquah, Wa. 160M thru 1296 MHz
(3456MHz still in the wings)

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sun, 20 Sep 1998 03:19:32 EDT
From: Ab7wy@aol.com
To: qrp-l@lehigh.edu
Subject: [20554] kayak/qrp IOTA dxpedition update
Message-ID: <37373190.3604ac84@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Hello friends:

just an update, i will try to start keeping updates coming as we get closer to the departure date.

ok, for those not sure what im talking about, i am planning a kayak trip into the puget sound to put new IOTA islands on the air. using solar power, i

will likely set up on the beach for a weekend then paddle back to the seattle area.

well, it seems that i may have a travel partner, Glenn Klindera. he will help

with carrying the load and taking photos. and yes, i am pushing him to get his

ticket before the trip, he is interested in ham radio and will likely have his

call before we get underway.

i have received some e-mails regarding support for the trip already, so hopefully there will be pictures and the story about the adventure up on the web.

i am assembling supplies now, we are going to kayak around (big) lake Washington in october to work out the bugs.

any advice, help or suggestions from other experienced kayakers or field

qrp'ers will be appreciated. we will need solar panels and cells, and help on

how to get the best performance out of them as well.

anyway, i will try to keep updates coming. thanks to those who have already helped with advice and tips.

73....Adam, AB7WY

p.s. this is my first big attempt at this so any help will be good help... :-)

Date: Sun, 20 Sep 1998 07:26:08 -0400 (EDT)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: QRP-L List <qrp-l@Lehigh.EDU>, gqrp-l@blacksheep.org,
towertalk@contesting.com, antennas@qth.net, antennaware@contesting.com
Subject: [20555] Vertical Dipoles and Ground Planes Update
Message-ID: <Pine.GS0.3.96.980920072431.12191A-100000@larry.cas.utk.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have added some notes on the questions that were left over from the initial part of the study. Hope the material is useful.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off)(423) 974-7215
1434 High Mesa Drive	/	\	\	\	----	/\---	(Hm) (423) 938-6335
Knoxville, Tennessee	/\	\	\	\	/	/ /	(FAX)(423) 974-3509
37938-4443 USA	/	\	\	\			cebik@utk.edu
URL:	http://web.utk.edu/~cebik/radio.html						

Date: Sun, 20 Sep 1998 09:28:29 -0400
From: "Jerry W. O'Dell" <jwodell@ameritech.net>
To: qrp-l@lehigh.edu

Subject: [20556] qrp rigs for sale
Message-ID: <19980920142754.CXQ8627@[199.179.189.252]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have the following rigs I never use for sale. All are \$60 each.
Dicker about the price and I won't answer. All worked last time I tried them.

(1) Wilderness SST -- cute little guy, but after a while the novelty of showing it to people at club meetings wears off.
Wilderness case.

(2) Green Mountain 40 -- cruddy case of my own devising.
Rig seems to have low receive gain, although I've worked lots of stations with it.

(3) Oak Hills OHR100A 30 Meter. Checked by Oak Hills. Just seems insensitive to me, compared to their other stuff. Their box.

All with manual. All where is/as is, but I don't cheat people, but they are my least preferred rigs, for one reason or another.

Terms -- money order or money. I'm going to spend more time going to the UPS and mailing the manual separately than it's worth fighting dead beats.

Hope I haven't disturbed the equanimity of the group.

73 jerry w8gnd -- send email to jwodel1@amteritech.net.

Date: Sun, 20 Sep 1998 13:46:21
From: ANDERS WANDAHL <qrp@usa.net>
To: qrp-1@Lehigh.EDU
Subject: [20557] SV9/SM0HPL on the air in one hour
Message-ID: <19980920134621.1787.qmail@www06.netaddress.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi all...

need SV9 two way qrp??

I will walk to my hotel *now*, will take
30-45 minutes.

Listen for my CQ on 14060 about 1445Z
and I will try to work you...

(QRN in Greece is somewhat high, can't promise
I will here you. Worked 7 two-way QRP QSO's yesterday,
though).

72's

Anders SV9/SM0HPL

Get free e-mail and a permanent address at <http://www.netaddress.com/?N=1>

Date: Sun, 20 Sep 1998 08:59:49 -0600
From: "Alyn Backe" <ve6bpr@cnnnet.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Cc: "qrp-canada" <qrp-canada@lists.gpfn.sk.ca>
Subject: [20558] LTA Straight Keys
Message-ID: <004601bde4a7\$511bf520\$8306e5cf@laptop>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Anyone using any of the LTA straight keys from Spain for your QRP work?
Any comments/opinions/suggestions appreciated.
Best 72/73, AL, VE6BPR.....sk

(Photon powered QRP Station)

Please e-mail direct to ve6bpr@cnnnet.com

Date: Sun, 20 Sep 1998 11:04:51 EDT
From: MJC191@aol.com
To: qrp-1@Lehigh.EDU
Subject: [20559] MFJ Reflector?
Message-ID: <6a73a6aa.36051993@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi Folks,

Does anyone know of an email reflector or newsgroup dedicated to MFJ topics, particularly the 90xx transceiver series?

Thanks & 72

Mike NA1XX / Weymouth MA

Date: Sun, 20 Sep 1998 10:14:11 -0500
From: "Tim, KD5CKP" <kd5ckp@bellsouth.net>
To: MJC191@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [20560] Re: MFJ Reflector?
Message-ID: <36051BC3.DF1@bellsouth.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

[Http://www.qth.net](http://www.qth.net) has n assortment of list available MFJ/Ameritron is listed there.

Hope this help.

73

Tim

MJC191@aol.com wrote:

>
> Hi Folks,
>
> Does anyone know of an email reflector or newsgroup dedicated to MFJ topics,
> particularly the 90xx transceiver series?
>
> Thanks & 72
>
> Mike NA1XX / Weymouth MA

--

```
*****  
* Tim Billingsley KD5CKP      FISTS #5201      Tech+ & hooked on CW  
* 15 Meter Slo-Chat >>>=>  http://www.qsl.net/kd5ckp/slo-chat.htm  
*****
```

Date: Sun, 20 Sep 1998 08:56:40 -0700
From: Jeff Grudin <grudin@pacific.vdbs.com>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [20561] QRP Items For Sale:
Message-ID: <360525B8.3D03E75B@vdbs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Seems to be a good time to lighten the redundancy in the shack:

Norcal 38S \$65 Shipped CONUS

5W mod, RIT mod, Tick keyer. In a Doug Hauf case with a plexiglass presentation cover.

Rig is working and has made many contacts. (Original Cover included for those that don't want to show off my work ;-)

Timewave DSP-9 \$85 Shipped CONUS

If you don't have a DSP Filter you don't know what you are missing. This filter really can help pull the weak ones out of the mud. I have 2 and only need one.

Radio Shack DSP Filter \$35 Shipped CONUS

We have been through the merits/shortcomings of this filter before. The truth is it is not the best DSP filter, but it is better than no DSP filter. At this price definitely worth thinking about. It is

a

nice accessory for QRP rigs as it provides filtration and an amplified speaker. This one is like brand new.

--

73 de AC6KW <mailto:grudin@vdbbs.com>

Jeff Grudin, DVM Web Add: <http://www.vdbbs.com/~grudin>

Ocean Animal Clinic / Cat Clinic of Santa Cruz - Santa Cruz, California

Norcal QRP #1292 QRP-L #16 ARS #351 AR Qrp #131

Date: Sun, 20 Sep 1998 12:28:50 EDT

From: RABRUNER@aol.com

To: hardie@shaw.wave.ca, qrp-1@Lehigh.EDU

Subject: [20562] Re: Am audio

Message-ID: <d742cfec.36052d42@aol.com>

Mime-Version: 1.0

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7bit

Content-Transfer-Encoding: 7bit

>>..the

> > perceived inferior quality of "communications quality"

> > audio is the result of the narrow bandwidth filters

> > used in filter SSB rigs.

>

> The absence

> of a carrier makes it much harder to correctly tune in a sideband signal

> so that the voice sounds natural.

There are several factors that make SSB audio sound less "natural" than other forms of modulation. One of these is the ringing in the very narrow filters used at both ends of the circuit, as well as other artifacts of filter construction. Collins mechanical filters have long been recognized as having a unique sound for instance. Most SSB radios on transmit and receive are designed to have "peaky" audio and the microphones used are very "present" compared to the practice with their AM counterparts.

But one of the biggest factors is inherent in the nature of SSB. Once audio has gone through the SSB generation process, all phase coherence between the various audio frequencies in the sideband is lost. SSB starts out as an AM signal in which all the audio modulation frequencies are translated to RF

frequencies (sidebands) with a definite phase relationship with the carrier and with each other. When the carrier is removed, this phase reference is lost and phase shifts in the subsequent filtering, amplification and propagation scrambles the phase relationships among the sideband frequencies. When the carrier is reinserted at the receiver this lack of phase coherence results in an 'unnatural' sound.

To see why this is so, recall that all complex sounds like speech, are composed of a series individual frequencies that have a set phase relationship to each other. When this phase relationship is lost, the character of the sound is changed completely. Cf old man Fourier and his transforms for confirmation. I suspect that it is this "phasey" sound that makes it so difficult for some folks to get their tuning on frequency.

It is due to the above that in commercial use, such as intercarrier telephony, "SSB" is frequently transmitted with a reduced sample of the original carrier, (about 10%) which is used as a pilot tone to phase lock the reinserted carrier at the receive end

A good way to demonstrate this phenomenon is to tune in an AM signal in SSB mode, carefully zero beating the carrier. The audio won't sound natural because you are demodulating the sideband against the local phase unlocked carrier. If you can then turn off the BFO without changing anything else, as on some older radios, so that you are demodulating the audio against the transmitted carrier, you will hear that "AM naturalness" return.

Bob Bruner
WB4TAJ/9

Date: Sun, 20 Sep 1998 09:41:35 -0700
From: Bruce Grubbs <bog@flagstaff.az.us>
To: qrp-1@Lehigh.EDU
Subject: [20563] QRP Afield log
Message-ID: <3.0.5.32.19980920094135.00946100@mail.infomagic.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
Content-Transfer-Encoding: quoted-printable

QRP Afield, September 19, 1998 - K7ZEN

Ops: K7ZEN, Scott, and N7CEE, Bruce

Location: Saddle Mountain, Coconino National Forest, Arizona, 8880 ft,=
DM45dk

Station: Wilderness Radio Sierra, WM-2 QRP wattmeter, 900 mw, end fed 40m
half wave in trees with =BC wave counterpoise, ZM-2 Z-match tuner, solar

charged batteries.

Band Pts	Date	Time	QSO#	Call	worked	Sent	Rcvd	Name	Qth	=
----	----	----	----	-----		----	----	----	----	=
20CW 4	19-Sep-98	18:02	1	N2CQ		559	559	5W	NJ	=
20CW 4	19-Sep-98	18:27	2	KI0AF		559	559	3W	IA	=
20CW 4	19-Sep-98	18:33	3	W0AV		559	559	2W	MO	=
20CW 4	19-Sep-98	18:37	4	WA8RXI		559	559	4W	MI	=
20CW 4	19-Sep-98	18:45	5	VE6EWM		559	339	3W	AB	=
20CW 4	19-Sep-98	18:52	6	WK8S		559	559	NR292	MI	=
20CW 4	19-Sep-98	18:57	7	W0UFO		559	549	2W	MN	=
40CW 4	19-Sep-98	19:28	8	K6UIZ		559	449	3W	CA	=
20CW 4	19-Sep-98	19:44	9	W4ED		559	339	5W	GA	=
20CW 4	19-Sep-98	19:47	10	AB5WX		559	559	5W	TX	=
20CW 4	19-Sep-98	19:54	11	AA5TB		559	559	500MW	TEX	=
20CW 4	19-Sep-98	19:58	12	WB0WQS		559	559	5W	MO	=
20CW 4	19-Sep-98	20:12	13	AF5Z		559	559	4W	TX	=
20CW 4	19-Sep-98	20:33	14	K5AAR		559	579	5W	OK	=
20CW 4	19-Sep-98	20:41	15	N7GS		559	549	2W	MT	=
20CW 4	19-Sep-98	20:48	16	N4R0A		559	449	5W	VA	=
20CW 4	19-Sep-98	20:49	17	K5AB		559	559	5W	TX	=
20CW 4	19-Sep-98	21:19	18	NF0R		559	449	1W	MO	=
20CW 4	19-Sep-98	21:26	19	AA0B		559	559	5W	MO	=
20CW 4	19-Sep-98	21:40	20	N5TW		559	559	900MW	TX	=

20CW	19-Sep-98	21:41	21	WW5XX	559	559	1W	TX	=
4									
20CW	19-Sep-98	21:43	22	KB9LCK	559	549	5W	IL	=
4									
20CW	19-Sep-98	21:48	23	K0EVZ	559	569	5W	MN	=
4									
15CW	19-Sep-98	22:09	24	WD8RIF	559	559	5W	OH	=
4									
15CW	19-Sep-98	22:16	25	N4R0A	*	559	559	5W	VA
4									=
40CW	19-Sep-98	22:36	26	WD7Y	559	339	4W	NV	=
4									
40CW	19-Sep-98	22:43	27	AB0CD	559	559	5W	CO	=
4									
40CW	19-Sep-98	22:47	28	W0XC	559	579	1W	CO	=
4									
40CW	19-Sep-98	22:55	29	K50I	559	559	NR368	NM	=
4									
40CW	19-Sep-98	22:56	30	AB7MY	559	549	5W	AZ	=
4									
40CW	19-Sep-98	23:13	31	W0CQC	559	559	5W	CO	=
4									
40CW	19-Sep-98	23:33	32	N6MM	559	579	3W	CA	=
4									

QSO's 32 x SPC's 19 x Power mult 4 x Portable mult 4 =3D 9728 points.

72,

Bruce, N7CEE
bog@flagstaff.az.us

Date: Sun, 20 Sep 1998 12:54:53 -0300
From: w4bld@juno.com
To: qrp-1@Lehigh.EDU
Subject: [20564] Ten-Tec Price Question
Message-ID: <19980920.125454.3326.0.w4bld@juno.com>

Hello list members - I have a question.

I have a chance to purchase an Argonaut 509, Linear 405, 247 Antenna

Tuner, and 206 crystal calibrator from an estate. The 509 does not have the accessory plug, although there is literature on the 208 filter which may be there somewhere but it has not yet been found. There is also a 215P microphone with a broken switch. (I assume that a new switch can be obtained from Ten-Tec and that a plug for the 509 will also be available if the filter is not found. Please correct me if you know differently. I also assume I can fix the dial cord problem after looking at the book. I do not know if the equipment works, but I can try it before I make payment.) The equipment is in the original boxes.

Here is my concern: What is a fair price to offer for the package. The equipment is in good shape with all pieces being an 8 -9 on a scale of 10. The 509 has dial cord problems and no cables. I want to be VERY fair in my offer.

Robert B. Kerby - W4BLD
PO Box 991 (231 Rosser Avenue)
Waynesboro, VA 22980
(540) 942-4356
(I collect Gonset, Morow and Elmac)

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sun, 20 Sep 1998 13:04:46 EDT
From: RABRUNER@aol.com
To: dgf@netcom.com, qrp-1@lehigh.edu
Subject: [20565] Re: suppressed carrier FM
Message-ID: <a943cd7a.360535ae@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

> >>> What do you get when you suppress the
> >>> carrier of FM -

> >You get nothing!
> >
> >As was aptly pointed out to me by someone on the list, no carrier equals
no
> >signal. The last post was mostly intended as sarcasm.

If you observe FM on a spectrum analyzer, you can see that the carrier actually goes to zero as a natural part of the FM modulation process. Depending on the deviation in use, and the modulation frequency, the carrier will go to zero, and all the energy will appear in the FM sidebands. While this isn't intuitive, it is easy to see if you get a chance to play with an audio oscillator and a spectrum analyzer. This phenomenon of carrier zeros is used to calibrate modulation monitors and set modulation levels as a matter of routine in commercial broadcast, videotape, and other FM work. While the total power in the FM signal remains constant, the division of power between the carrier and the sidebands varies dynamically with the modulation.

You can even see this to some extent with an ordinary oscilloscope if you have one that will trigger reliably in the range of frequencies in use. If you can lock up the scope and set the time base to show just a few cycles of carrier, and then apply tone modulation, you can see the carrier amplitude drop and many other nearby frequencies appear as "grass." Dynamic modulation, such as voice, will not make the phenomenon as obvious. Bear in mind, this will take a pretty good scope, but something like an old Tek 485 should work well enough to at least get the idea. Lower bandwidth, poorer triggering scopes won't work.

I think there is confusion over FM carrier behavior because so many introductory and some higher level books on radio oversimplify the description of FM to the point of making the totally inaccurate statement that "in FM the carrier amplitude remains constant." This is simply not so. The POWER OUTPUT of an FM transmitter remains constant, but the carrier amplitude varies all over the place. Ironically, these same books will tell you that the carrier amplitude of an AM station will vary with modulation. Here again, this is a completely inaccurate and misleading simplification. The POWER output of an AM station will vary with modulation, but the carrier level remains ideally constant. The increase in power with modulation is only from the energy of the sidebands. In fact, in the days when the FCC had technical standards for broadcast stations, there was a regulation that the "carrier level of an AM station must not vary by more than 4% under any condition of modulation." Most broadcast AM transmitters beat this spec by an order of magnitude. The reason there would be any variation at all had nothing to do with the theoretical aspects of modulation, but rather power supply sag in a practical transmitter.

73

Bob Bruner
WB4TAJ/9

Date: Sun, 20 Sep 98 11:06:03 -0700
From: "James R. Duffey" <jamesd1@flash.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [20566] PVC, Sideband FM, Narrow FM, and the Heath Dipper er
Message-ID: <199809201706.MAA29099@endeavor.flash.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

All - I have been busy the last few days and have just gotten around to reading the QRP-L digests from the last 4 days. I have a few comments on the popular threads (technical of course).

Let's take up the subject of using PVC for insulators. Putting PVC in a microwave at 2000+ MHz won't tell you much about its performance at 7.040 MHz. If you want to do neat things in your microwave I have a few other suggestions though. See below. You don't need a Plastics Handbook either. When I want information on things related to radio I go to the ARRL Handbook. It should be everybody's first stop.

On pages 24.32 and 24.33 (1998 edition of course) is a table entitled "Properties of Common Thermoplastics". Rigid PVC is listed, as is flexible. Rigid PVC has a dissipation factor (a measure of loss in the material, and hence it's suitability as a low loss insulator) of 0.009 to 0.017. Lower is better. Flexible is 0.07 to 0.16, which is why Zip cord is lossy when used as a transmission line. How does this compare to other plastics commonly suggested as alternatives to PVC??

Nylon has listed dissipation factors of 0.02 to 0.03, Phenolic as 0.025 to 0.10, high density polyethylene as 0.0003, and polystyrene as 0.0001 to 0.0003. So PVC's dissipation factor falls right in the middle of other recommended "good electrical insulators".

There is a potential problem with all this, and that is that the numbers in the ARRL table are for 1 kHz, as far off in one direction as the microwave test is in the other.

I dug up my copy of "Reference Data for Radio Engineers", third edition, 1953, A \$0.50 book purchased at the local library sale. It has a "Properties of Materials" table, with dissipation factors listed at 1 MHz and 100 MHz as well as at higher and lower frequencies.

At 1 MHz, PVC has a dissipation factor of 0.016, Nylon 0.0218, Phenolic 0.028 to 0.06, Polyethylene 0.0003, Polystyrene 0.00007, and Teflon (not listed by the ARRL), 0.0002. Again PVC is right in the middle.

Why then does PVC have such a bad rap?? I think it is that picture in QST 20 years ago of the 160 M loading coil for a mobile vertical whip. The coil was long and skinny, and wound with relatively fine wire. It must have had a very poor Q, and high losses in the coil this would result in heating and eventual melting of the PVC.

So, let's compare deflection temperatures at 64 psi, which are listed in the ARRL table. This is a measure of what temperature the plastic will soften and lose its mechanical properties. PVC softens at 135 to 180 F, Nylon (depending on the type) at anywhere from 154 to 455 F, Phenolic at 310 to 400 F, high density polyethylene at 140 to 190 F, and polystyrene at 190 to 245 F. PVC is clearly at the bottom of this list.

What does this all mean? Well, PVC should be a perfectly good material when used as center insulators, end insulators, and forms for high Q coils used at low powers. One should avoid winding low Q coils 20 inches long, 1 inch in diameter with 20 gauge wire on PVC. High losses will result and the heating will soften the PVC as in the QST photograph. If the PVC is relied upon for structural integrity as it was in the QST photo, then disaster will result. I think that PVC will be an acceptable RF insulator if high current, low loss applications are avoided.

If the above numbers are not convincing, how does one determine whether or not the particular PVC you want to use is acceptable?? The best way to do this is to wind a coil on the PVC and measure the coil's Q at the frequency of interest. Jack Kuecken, KE2QJ, did this in his article "A High Efficiency Mobile Antenna Coupler" in "Antenna Compendium Vol. 5" (ARRL). He found that a coil wound on PVC had a Q of 150 to 160, which was about 20% lower than a good air wound coil he made. He came to the conclusion that the PVC was satisfactory for his application and more convenient to make.

Summary - PVC should be satisfactory for use as an antenna material if it is applied with common sense. I use the grey electrical conduit as it is UV resistant. That is a major consideration at my altitude (7000 ft asl).

Now on to FM.

The FM sidebands on one side of the center frequency can be suppressed and the same information still be conveyed. Studies were done on this mode by professional communication engineers after the success of SSB became evident in the 50s. They concluded that, unlike the case of SSB over AM, there was no inherent advantage of SSB FM over conventional FM as essentially the same improvement in signal to noise ratio could be obtained by narrowing the standard FM deviation to the same bandwidth occupied by the sideband FM signal.

FM topic number 2. There was some experimentation with very narrow FM by amateurs after WW2. The goal was to use a deviation that occupied a bandwidth less than or equal to the AM signals of the day, which was 6 kHz. It worked technically very well. It did not succeed for two reasons, the FCC was reluctant to permit FM on the HF bands below 10 M even though

the bandwidth was less than or equal to the AM bandwidths of the day, and SSB came along, satisfied the same needs, and did not need specific FCC approval as it was "Amplitude Modulated". Technical choices are often driven by beauracrats.

I attended the Albuquerque HamFest yesterday and purchased a Heath Tunnel diode dipper for \$5. I could not pass it up, although the MFJ and Autek analyzers have largely made grid dippers obsolete. Does anyone have a manual for this??

I also have joined the ranks of my contemporary Hams in the latter 3 decades of the Twentieth Century. I purchased a Kenwood 9130 multi mode 2 M rig. It is the first 2 M FM capability I have ever had!! Now it is antenna time.

Now for those microwave tricks. Children of all ages-send your parental authority figure out of the room. Raisins can be turned back into grapes, at least for a short time. Marshmallows have already been discussed. Eggs are interesting if done in the shell with no pin pricks. They can be interesting if cracked and the yolk left intact. Hormel used to make weiners that were stuffed with Texas chili or cheese. These are nicely converted into cannons in the microwave. There are all sorts of bug stories of course, but I have seen a frozen cockroach briefly brought back to life in a microwave after a day in the deep freeze. These experiments are, of course, best done without adult supervision. :^) Clean up carefully afterwards and destroy the evidence.

Buy a new Handbook. Use it. If you already have one, or don't want to buy one every year, buy a new Antenna Book. Use it as well.- Dr. Megacycle
KK6MC/5

James R. Duffey KK6MC/5 DM65
30 Casa Loma Road
Cedar Crest NM 87008

Date: Sun, 20 Sep 1998 12:45:57 -0500
From: Tim Ahrens <tahrens@inetport.com>
To: qrp-1@Lehigh.EDU
Subject: [20567] Sierra Sold
Message-ID: <36053F55.CDDCF13E@inetport.com>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

The Sierra is sold.

Thanks,

Tim W5FN

Date: Sun, 20 Sep 1998 14:05:48 -0400
From: mikemo@ibm.net
To: qrp <qrp-1@Lehigh.EDU>
Subject: [20568] cell phones and CW
Message-ID: <360543FC.6E36@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Just got a new cell phone yesterday, Nokia 918. It has 5 different ring sounds. Ring #5 sends CQ at about 20 WPM. What a blast!
72 de ku4qo, Mike Maiorana, Palm Harbor, FL

Date: Sun, 20 Sep 1998 14:06:30 EDT
From: RABRUNER@aol.com
To: kaliic@ime.net, qrp-1@Lehigh.EDU
Subject: [20569] Re: Am audio (overmod)
Message-ID: <6301428f.36054426@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

> > >How the devil did you get greater than 100% modulation without
> > >clipping diodes or something?

> There were several different methods . . . I believe it is possible
> to go beyond 100 percent modulation in the negative peak cycle. The
> story goes that negative peaks don't cause the splatter like the

> positive peaks. I do know that this has been used in the Commercial
> broadcast industry for years without any ill effects. . . .
>

In the 1970s Commercial broadcast stations and equipment suppliers were experimenting with what came to be called "super modulation." It was recognized that >100% negative modulation caused "splatter," or off-channel spurs, to be radiated with the signal, but it was not certain that >100% upward, or positive modulation had any ill effects. I believe ABC network O&O's and Harris (Gates Radio) were among those involved in this. Eventually, this work led to rulemaking that permitted AM stations to use 135% upward modulation provided that negative, or inward modulation did not exceed 100%. The proviso was added that any transmitter thus operated had to "capable" of achieving those modulation levels with no more distortion than during normal operation.

The necessary asymmetry is achieved with commonly available audio processing gear. One early example of this is the CBS Labs Volumax, which was a fast attack/release audio AGC which featured a peak clipper on its output. You could remove the positive peak clipping diode and the Volumax would clip only the negative peaks, providing asymmetrically clipped audio to the input of the transmitter. There were other devices that would dynamically sense which polarity of audio had the greater energy and switch phase to make sure this was the sense that caused "up" modulation.

The problem with >100% positive modulation was nothing to do with the modulation process. In some experiments, they achieved 200% modulation without objectionable splatter. The simple fact is that in most A.M. transmitters the power supplies and modulation transformers were not designed to produce enough clean audio drive to allow those modulation levels. Later transmitters were designed with supermodulation in mind, but one workaround used by some early stations was to employ a higher power transmitter cut back to the licensed output but with a modulator sitting there capable of providing the higher modulation levels desired. One Popular rig was the Bauer 10kw unit run at 5kw.

Over modulation, plus or minus, is often not audible when listening with a typical receiver on frequency. That's why some station engineers make the assertion that it is possible to over modulate without harm. This is because the distortion products produced appear outside the passband of the receiver, and are just not audible. For example, if you clip a 3kHz tone, the first distortion product would be 6kHz away from the carrier and not make it through the typical 4kHz I.F. in the receiver. Lower frequencies would produce passband splatter, but it would be masked by the relatively high density of audio in the passband. For example, the first distortion product of 1KHz would be 2 kHz, but this is right in the middle of the dense voice modulation frequencies, where it would be hidden by psycho-acoustic masking. Lower frequency distortion products, such as 100Hz don't affect voice modulation at all, and sometimes produce a subjectively attractive "fattening" of bass in music.

Off carrier, though, all these distortion products produce "popcorn" up and down the band, and cause interference to other stations. That is why

overmodulation is an issue. It should be noted also that any audio distortion, whether caused by over modulation, or simple distortion in the audio circuits, would result in the same splatter.

As a practical matter, as far as amateur use is concerned, there has not been a rulemaking to allow super modulation on the hambands as far as I know, and it is just not permitted -- even though it might be beneficial to some burgeoning AM QRPer.

73

Bob Bruner

WB4TAJ

Date: Sun, 20 Sep 1998 14:32:44 -0400
From: Ken Newman <n2cq@citnet.com>
To: QRP-L@lehigh.edu
Cc: njqrp@njqrp.org
Subject: [20570] QRP Afield
Message-ID: <1.5.4.16.19980920183015.088f1104@mail.citnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi QRP Contesters,

QRP Afield had more activity I can remember! Thanks to NN1G in managing the Afield Sprint, and the surprising QSO on 20m later in the test. Thanks to all for calling!

.....
Call used: N2CQ

Location: NJ

Category: Home - 5 Watts

Callsign of Operator: N2CQ

Exchanged Information: N2CQ RST NJ 5W

Hours of Operation: 04:53

band	QSOs	points	mults
160	0	0	0
80	0	0	0
40	59	118	18
20	38	76	18
15	7	14	3
10	0	0	0

TOTAL 104 208 39

Power Mult X 2

SCORE: 208 X 39 X 2 + 16,224
 ^^^^^^

Comments:

Couldn't make it for the 6 hours due to company, BUT WOW
great activity this time at the beginning of the sprint. Had to
use the home station due to work availability. Great fun for the
5 hours though. MORE! MORE!

Equipment: Kenwood TS-850sat, TA33jr Tribander, CF Zepp

72/73,
Ken Newman, N2CQ
Woodbury, NJ
N2CQ@Citnet.com

Date: Sun, 20 Sep 1998 13:22:52 -0600 (MDT)
From: marion@montana.com
To: qrp-1@Lehigh.EDU
Subject: [20571] ten mtrs
Message-ID: <199809201922.NAA18047@paw.montana.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Ten mtrs is open from Montana. Wrked W1LIC in Maine and WA2VQV,
N.J., not DX I know but still fun. Sierra is running so get on and give me a
call! Roy, AB7CE

Date: Sun, 20 Sep 1998 13:04:32 -0700
From: Bob Painter <turnkey@exo.com>
To: k6hcj@juno.com, "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [20572] Re: GOLDMINE FORTHCOMING:

Message-ID: <199809201953.MAA24677@ns1.snni.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Stan is also a good source is you need silver bearing solder.(This is what you want to use if you are soldering on the Tek ceramic terminal strips.

Stan also has some other repair parts. I bought some new leather handles for a Tek 502 scope a few years ago and have been quite happy with them.

73, Bob Painter KF6NKH

At 01:39 PM 9/19/98 -0700, Marv Fagenson wrote:
>I usually am silent here but I found a book which could be valuable to
>some of us. Barnes and Noble (booksellers) has Oscilloscopes: Selecting
>and Restoring a Classic. It is written by Stan, W7NI.

Date: Sun, 20 Sep 1998 14:08:15 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-l@lehigh.edu, cqclist@mtechnologies.com
Subject: [20573] QRP Afield, W0CQC op
Message-ID: <199809202007.0AA23279@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-Transfer-Encoding: 7BIT

W0CQC was on the air from Daniels Park, south of Denver, CO.
Operators were WJ1R/UA6HZ and N1FN.

We put up a G5RV but were unable to get it to load, so switched back to the N1FN mobile radio shack with Hustler antenna. Thereby moving into a different class, fwiw.

Conditions were patchy but generally not too bad on 20M. 15M had its moments but little or no activity. 40M was too noisy for words (or CW). A brief rain shower came through about 5pm but didn't cost us much operating time-- unlike the last visit to Daniels where we lost a couple hours due to thunderstorms. Nearby storms yesterday did result in S9 static crashes on 20M.

We ended up with (first count) 91 QSOs, but won't know much more till I have time to process the log.

Great fun, and we're looking forward to the next one.

73

Marshall Emm

N1FN/VK5FN

n1fn@MorseX.com

Morse Express

"Everything for the Morse Enthusiast"

<http://www.MorseX.com>

(303)752-3382

--

Date: Sun, 20 Sep 1998 13:31:36 -0700
From: Jeff Grudin <grudin@pacific.vdbs.com>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [20574] RE: QRP Items for Sale
Message-ID: <36056628.C5549B5D@vdbs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

The 38s and DSP-9 are sold. The new owners have been notified. I am keeping a list of all others in case the sale falls through. Thanks for your interest.

The RS DSP is still available.

--

73 de AC6KW <<mailto:grudin@vdbs.com>>
Jeff Grudin, DVM Web Add: <http://www.vdbs.com/~grudin>
Ocean Animal Clinic / Cat Clinic of Santa Cruz - Santa Cruz, California
Norcal QRP #1292 QRP-L #16 ARS #351 AR Qrp #131

Date: Sun, 20 Sep 1998 17:32:17 -0400 (EDT)
From: Rich Mulvey <mulveyr@mulveyr.roc.servtech.com>
To: qrp-l@Lehigh.EDU
Subject: [20575] RE: ten mtrs

Message-ID: <XFMail.980920173217.mulveyr@mulveyr.roc.servtech.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 8bit
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

On 20-Sep-98 marion@montana.com wrote:

> Ten mtrs is open from Montana. Wrked W1LIC in Maine and WA2VQV,
> N.J., not DX I know but still fun. Sierra is running so get on and give me a
> call! Roy, AB7CE

Wow. 10 meters from here (upstate NY) is *incredible* today. Makes me
happy that I bought the HTX-100 rig two years ago. :-)

- Rich

--

Rich Mulvey
My return address is my last name,
followed by my first initial, @mulveyr.roc.servtech.com
<http://mulveyr.roc.servtech.com>
Amateur Radio: aa2ys@wb2wxq.#wny.ny.usa

Date: Sun, 20 Sep 1998 17:52:00 EDT
From: Bensondj@aol.com
To: qrp-l@Lehigh.EDU
Subject: [20576] 'QRP Afield'- Reporting
Message-ID: <d0c1f131.36057900@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

gang-

It was a blast working many of you on Saturday! My daughter
and I enjoyed the weekend camping in VT, and we even got to
see our first moose up close- a real thrill!

OK, here are the reporting rules- we'll keep this simple:

Send me your station location and call, as well as the
following information:

your category (home/portable/rover)
your QSO point total (based on total QSOs x category multiplier)
your maximum output power

If you want to figure your score, that's fine, or I'll just reach for the calculator myself. Any other information, such as rig(s), antenna, etc, is fine. Please be sure to include soapbox comments or stories and by all means, share your stories with this list as well. That way, we can all enjoy them right away!

Deadline for submittal is 30 days from now- I'll post several reminders between now and then, and I'll put up interim results. Be sure to send scoring information to me, <bensondj@aol.com>

Thanks to all those who were able to participate- this really was a good time!

72, Dave Benson, NN1G

" My sister was once bitten by a moose." ;-)

Date: Sun, 20 Sep 1998 18:02:31 EDT
From: BADDBadger@aol.com
To: qrp-1@Lehigh.EDU
Subject: [20577] Re: Am audio (overmod)
Message-ID: <5b1022a4.36057b77@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

In a message dated 9/20/98 2:10:18 PM, RABRUNER@aol.com writes:

```
>> > >How the devil did you get greater than 100% modulation without
>> > >clipping diodes or something?
>
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>> to go beyond 100 percent modulation in the negative peak cycle. The
>> story goes that negative peaks don't cause the splatter like the
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>> broadcast industry for years without any ill effects. . . .
```

>>
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> As a practical matter, as far as amateur use is concerned, there has
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>know,
>and it is just not permitted -- even though it might be beneficial to some
>burgeoning AM QRPers.
>
>73
>Bob Bruner
>WB4TAJ

An example of just how much bandwidth can be used by a poorly functioning rig:
I was testing a friend's homebrew Confederate KW (500 W) linear in SSB mode
which used a single 1 KHz audio tone for tuning the final pi-net circuit, and
the linear apparently broke into self-oscillation during the process. I made a
few QSOs afterward. Apparently, this rig would also break into self-
oscillation when the rig was used under QSO conditions. Afterwards, I heard
about it!

This rig was producing splatter (other term commonly used is "buckshot")
sidebands clearly audible over 150 KHz from the carrier frequency (I assume on
both sides of the carrier). Whenever you are operating with an efficient
antenna array such as I had available at my disposal, it is better to use a
dummy load than using an "unused" channel for initial testing. It is
uncertain, as this case indicated, to have 300 KHz of bandwidth available.
Since I was a chief engineer of an AM station, in this case, I should have
used the 20 KW dummy load. Then a simple test with a communications receiver
can be used to test the operation and bandwidth of an unknown piece of gear.

This way you can keep peace with your neighbors.

Date: Sun, 20 Sep 1998 18:24:44 EDT
From: BADDBadger@aol.com
To: qrp-l@Lehigh.EDU
Subject: [20578] Re: cell phones and CW
Message-ID: <c4b09cab.360580ac@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

In a message dated 9/20/98 2:08:23 PM, mikemo@ibm.net writes:

>Just got a new cell phone yesterday, Nokia 918. It has 5 different ring
>sounds. Ring #5 sends CQ at about 20 WPM. What a blast!
>72 de ku4qo, Mike Maiorana, Palm Harbor, FL

I subscribed to the Sprint PCS system (1.9 GHz) 9 days ago using a Samsung SCH-1900 unit. It also has a number of weird ring sounds. I'll have to check them all out. Maybe some ring is responding to the CQ!

End of QRP-L Digest 1220

